WHAT IS CLAIMED

1. An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

(a) the nucleotide sequence as set forth in SEQ ID NO: 1;

(b) a nucleotide sequence encoding the polypeptide as set forth in SEQ ID NO: 2;

(c) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of (a) or (b), wherein the encoded polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2; and

(d) a nucleotide sequence complementary to any of (a)-(c).

2. An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence encoding a polypeptide that is at least about 70, 75, 80, 85, 90, 95, 96, 97, 98, or 99 percent identical to the polypeptide as set forth in SEQ ID NO: 2, wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2;

(b) a nucleotide sequence encoding an allelic variant or splice variant of the nucleotide sequence as set forth in SEQ ID NO: 1, wherein the encoded polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2;

(c) a nucleotide sequence of SEQ ID NO: 1; (a); or (b) encoding a polypeptide fragment of at least about 25 amino acid residues, wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2;

(d) a nucleotide sequence of SEQ ID NO: 1, or (a)-(c) comprising a fragment of at least about 16 nucleotides;

(e) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of any of (a)-(d), wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2; and

(f) a nucleotide sequence complementary to any of (a)-(c).

3. An isolated nucleic acid molecule comprising a nucleotide sequence selected from the group consisting of:

(a) a nucleotide sequence encoding a polypeptide as set forth in SEQ ID NO: 2 with at least one conservative amino acid substitution, wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2;

(b) a nucleotide sequence encoding a polypeptide as set forth in SEQ ID NO: 2 with at least one amino acid insertion, wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2;

(c) a nucleotide sequence encoding a polypeptide as set forth in SEQ ID NO: 2 with at least one amino acid deletion, wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2;

(d) a nucleotide sequence encoding a polypeptide as set forth in SEQ ID NO: 2 which has a C- and/or N- terminal truncation, wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2;

(e) a nucleotide sequence encoding a polypeptide as set forth in SEQ ID NO: 2 with at least one modification selected from the group consisting of amino acid substitutions, amino acid insertions, amino acid deletions, C-terminal truncation, and N-terminal truncation, wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2;

(f) a nucleotide sequence of (a)-(e) comprising a fragment of at least about 16 nucleotides;

(g) a nucleotide sequence which hybridizes under moderately or highly stringent conditions to the complement of any of (a)-(f), wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2; and

(h) a nucleotide sequence complementary to any of (a)-(e).

4. A vector comprising the nucleic acid molecule of Claims 1, 2, or 3.

5. A host cell comprising the vector of Claim 4.

6. The host cell of Claim 5 that is a eukaryotic cell.

7. The host cell of Claim 5 that is a prokaryotic cell.

8. A process of producing an IL-17 receptor like polypeptide comprising culturing the host cell of Claim 5 under suitable conditions to express the polypeptide, and optionally isolating the polypeptide from the culture.

9. A polypeptide produced by the process of Claim 8.

10. The process of Claim 8, wherein the nucleic acid molecule comprises promoter DNA other than the promoter DNA for the native IL-17 receptor like polypeptide operatively linked to the DNA encoding the IL-17 receptor like polypeptide.

11. The isolated nucleic acid molecule according to Claim 2 wherein the percent identity is determined using a computer program selected from the group consisting of GAP, BLASTP, BLASTN, FASTA, BLASTA, BLASTX, BestFit, and the Smith-Waterman algorithm.

12. A process for determining whether a compound inhibits IL-17 receptor like polypeptide activity or production comprising exposing a cell according to Claims 5, 6, or 7 to the compound, and measuring IL-17 receptor like polypeptide activity or production in said cell.

13. An isolated polypeptide comprising the amino acid sequence set forth in SEQ ID NO: 2.

14. An isolated polypeptide comprising the amino acid sequence selected from the group consisting of:

(a) an amino acid sequence for an ortholog of SEQ ID NO: 2, wherein the encoded polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2;

(b) an amino acid sequence that is at least about 70, 80, 85, 90, 95, 96, 97, 98, or 99 percent identical to the amino acid sequence of SEQ ID NO: 2, wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2;

(c) a fragment of the amino acid sequence set forth in SEQ ID NO: 2 comprising at least about 25 amino acid residues, wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2;

(d) an amino acid sequence for an allelic variant or splice variant of either the amino acid sequence as set forth in SEQ ID NO: 2, or at least one of (a)-(b) wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2.

15. An isolated polypeptide comprising the amino acid sequence selected from the group consisting of:

(a) the amino acid sequence as set forth in SEQ ID NO: 2 with at least one conservative amino acid substitution, wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2 as determined using the computer

program of GAP, BLASTP, BLASTN, FASTA, BLASTA, BLASTX, BestFit, or the Smith-Waterman algorithim,

(b) the amino acid sequence as set forth in SEQ ID NO: 2 with at least one amino acid insertion, wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2;

(c) the amino acid sequence as set forth in SEQ ID NO: 2 with at least one amino acid deletion, wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2;

(d) the amino acid sequence as set forth in SEQ ID NO: 2 which has a C- and/or N-terminal truncation, wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2; and

(e) the amino acid sequence as set forth in SEQ ID NO: 2, with at least one modification selected from the group consisting of amino acid substitutions, amino acid insertions, amino acid deletions, C-terminal truncation, and N-terminal truncation, wherein the polypeptide has an activity of the polypeptide as set forth in SEQ ID NO: 2.

16. An isolated polypeptide encoded by the nucleic acid molecule of Claims 1, 2, or 3.

17. The isolated polypeptide according to Claim 14 wherein the percent identity is determined using a computer program selected from the group consisting of GAP, BLASTP, BLASTN, FASTA, BLASTA, BLASTX, BestFit, and the Smith-Waterman algorithm.

18. A polypeptide according to claim 15 or 16 wherein the amino acid at position 45 of SEQ ID NO: 2 is glycine, proline, or alanine.

19. A polypeptide according to claim 15 or 16 wherein the amino acid at position 227 of SEQ ID NO: 2 is phenylalanine, leucine, valine, isoleucine, alanine, or tyrosine.

20. A polypeptide according to claim 15 or 16 wherein the amino acid at position 363 of SEQ ID NO: 2 is serine, threonine, alanine or cysteine.

21. A polypeptide according to claim 15 or 16 wherein the amino acid at position 374 of SEQ ID NO: 2 is valine, isoleucine, methionine, leucine, phenylalanine, alanine or norleucine.

22. A polypeptide according to claim 15 or 16 wherein the amino acid at position 385 of SEQ ID NO: 2 is cysteine, serine, alanine.

23. A polypeptide according to claim 15 or 16 wherein the amino acid at position 515 of SEQ ID NO: 2 is aspartic acid or glutamic acid.

24. A polypeptide according to claim 15 or 16 wherein the amino acid at position 602 of SEQ ID NO: 2 is cysteine, alanine or serine.

25. An antibody produced by immunizing an animal with a peptide comprising an amino acid sequence of SEQ ID NO: 2.

26. An antibody or fragment thereof that specifically binds the polypeptide of Claims 13, 14, or 15.

27. The antibody of Claim 26 that is a monoclonal antibody.

28. A hybridoma that produces a monoclonal antibody that binds to a peptide comprising an amino acid sequence of SEQ ID NO: 2.

29. A method of detecting or quantitating the amount of IL-17 receptor like polypeptide in a sample comprising contacting a sample suspected of containing IL-17 receptor like polypeptide with the anti-IL-17 receptor like antibody or fragment of Claims 25, 26, or 27 and detecting binding of said antibody or fragment.

30. A selective binding agent or fragment thereof that specifically binds at least one polypeptide wherein said polypeptide comprises the amino acid sequence selected from the group consisting of:

a) the amino acid sequence as set forth in SEQ ID NO: 2; and

b) a fragment of the amino acid sequence set forth in at least one of SEQ ID NO: 2; and

c) a naturally occurring variant thereof.

31. The selective binding agent of Claim 30 that is an antibody or fragment thereof.

32. The selective binding agent of Claim 30 that is a humanized antibody.

33. The selective binding agent of Claim 30 that is a human antibody or fragment thereof.

34. The selective binding agent of Claim 30 that is a polyclonal antibody or fragment thereof.

35. The selective binding agent Claim 30 that is a monoclonal antibody or fragment thereof.

36. The selective binding agent of Claim 30 that is a chimeric antibody or fragment thereof.

37. The selective binding agent of Claim 30 that is a CDR-grafted antibody or fragment thereof.

38. The selective binding agent of Claim 30 that is an antiidiotypic antibody or fragment thereof.

39. The selective binding agent of Claim 30 which is a variable region fragment.

40. The variable region fragment of Claim 39 which is a Fab or a Fab' fragment.

41. A selective binding agent or fragment thereof comprising at least one complementarity determining region with specificity for a polypeptide having the amino acid sequence of SEQ ID NO: 2.

42. The selective binding agent of Claim 30 which is bound to a detectable label.

43. The selective binding agent of Claim 30 which antagonizes IL-17 receptor like polypeptide biological activity.

44. A method for treating, preventing, or ameliorating a disease, condition, or disorder associated with altered levels of IL-17 receptor like polypeptide comprising administering to a patient an effective amount of a selective binding agent according to Claim 30.

45. A selective binding agent produced by immunizing an animal with a polypeptide comprising an amino acid sequence

selected from the group consisting of SEQ ID NO: 2.

46. A hybridoma that produces a selective binding agent capable of binding a polypeptide encoded by the nucleic acid of Claims 1, 2, or 3.

47. A composition comprising the polypeptide of Claims 13, 14, or 15 and a pharmaceutically acceptable formulation agent.

48. The composition of Claim 47 wherein the pharmaceutically acceptable formulation agent is a carrier, adjuvant, solubilizer, stabilizer, or anti-oxidant or combination thereof.

49. The composition of Claim 47 wherein the polypeptide comprises the mature amino acid sequence as set forth in SEQ ID NO: 2.

50. A polypeptide comprising a derivative of the polypeptide of Claims 13, 14, or 15.

51. The polypeptide of Claim 50 which is covalently modified with a water-soluble polymer.

52. The polypeptide of Claim 51 wherein the water-soluble polymer is selected from the group consisting of polyethylene glycol, monomethoxy-polyethylene glycol, dextran, cellulose, poly-(N-vinyl pyrrolidone) polyethylene glycol, propylene glycol homopolymers, polypropylene oxide/ethylene oxide co-polymers, polyoxyethylated polyols, and polyvinyl alcohol.

53. A composition comprising a nucleic acid molecule of Claims 1, 2, or 3 and a pharmaceutically acceptable formulation agent.

54. A composition of Claim 53 wherein said nucleic acid molecule is contained in a viral vector.

55. A viral vector comprising a nucleic acid molecule of Claims 1, 2, or 3.

56. A fusion polypeptide comprising the polypeptide of Claims 13, 14, or 15 fused to a heterologous amino acid sequence.

57. The fusion polypeptide of Claim 56 wherein the heterologous amino acid sequence is an IgG constant domain or fragment thereof.

58. A method for treating, preventing or ameliorating a medical condition comprising administering to a patient the polypeptide of Claims 13, 14, or 15 or the polypeptide encoded by the nucleic acid of Claims 1, 2, or 3 to said mammal.

59. A method of diagnosing a pathological condition or a susceptibility to a pathological condition in a subject caused by or resulting from abnormal levels of IL-17 receptor like polypeptide comprising:

(a) determining the presence or amount of expression of the polypeptide of Claims 13, 14, or 15 or the polypeptide encoded by the nucleic acid molecule of Claims 1, 2, or 3 in a sample; and

(b) diagnosing a pathological condition or a susceptibility to a pathological condition based on the presence or amount of expression of the polypeptide.

60. A device, comprising:

(a) a membrane suitable for implantation; and

(b) cells encapsulated within said membrane, wherein said cells secrete a protein of Claims 13, 14, or 15, and wherein said membrane is permeable to said protein and impermeable to materials detrimental to said cells.

61. A device, comprising:

(a) a membrane suitable for implantation; and

(b) the IL-17 receptor like polypeptide encapsulated within said membrane, wherein said membrane is permeable to the polypeptide.

62. A method of identifying a compound which binds to a polypeptide comprising:

(a) contacting the polypeptide of Claims 13, 14, or 15 with a compound; and

(b) determining the extent of binding of the polypeptide to the compound.

63. A method of modulating levels of a polypeptide in an animal comprising administering to the animal the nucleic acid molecule of Claims 1, 2, or 3.

64. A transgenic non-human mammal comprising the nucleic acid molecule of Claims 1, 2, or 3.

65. A transgenic non-human comprising a disruption of the nucleic acid molecule of claim 1, 2 or 3 wherein the expression of IL-17 receptor polypeptide is decreased.

66. A method of identifying antagonists of IL-17 receptor like polypeptide biological activity comprising:

(a) contacting a compound with an IL-17 receptor like polypeptide;

(b) detecting the biological activity of an IL-17 receptor like polypeptide in the presence of said compound; and

(c) comparing the level of IL-17 receptor like polypeptide biological activity in the presence and absence of said compound.

67. Then method of claim 66 wherein the compound is a small molecule, peptide, protein, carbohydrate, or antibody.

68. A method of modulating levels of a polypeptide in an animal comprising administering to the animal the nucleic acid molecule of claims 1, 2, or 3.

69. An antagonist of IL-17 receptor like polypeptide activity selected from the group consisting of IL-17 receptor like selective binding agents, small molecules, antisense oligonucleotides, and peptides or derivatives thereof having specificity for IL-17 receptor like polypeptide.

70. A method of reducing cellular production of IL-17 receptor like polypeptide, comprising transforming or transfecting cells with a nucleic acid encoding an antagonist according to claim 69.

71. A method according to claim 70, wherein the antagonist is an antisense reagent, said reagent comprising an oligonucleotide comprising a single stranded nucleic acid sequence capable of binding to IL-17 receptor like mRNA.